Philosophy of Experiment

Stockholm, 16.-17. November 2023

Program:

Thursday, November 16

9.30-9.40 Welcome

9.45-10.30 Dana Matthiessen (Minnesota C. for Phil.Sci.) and Nora Mills Boyd (Siena Coll.)
Observations, Experiments, and Arguments for Epistemic Superiority in Scientific Methodology

10.35-11.20 Collin Rice (Colorado State U.)
Balancing Experimental and Mathematical Constraints in Mesoscale Modeling in Physics

Coffee

11.50-12.35 Giora Hon (U. Haifa)
Elements of the practice of experimentation: Commitment, methodology and technique

12.35-14.00 Lunch

14.00-14.45 Till Grüne-Yanoff (KTH Stockholm)
Simulations Are Not Experiments

14.50-15.35 Milena Ivanova (Cambridge U.)
What Makes an Experiment Beautiful?

Coffee

16.00-16.45 James Mattingly (U. Georgetown)
Classifying experiments by way of information bottlenecks

Friday, November 17

9.45-10.30 Hugo Baeuchemin (CERN & Tufts U.), Kent Staley (St Louis U.)
What is empirical? A consideration from the triad of measurement, uncertainty, and sensitivity

10.35 -11.20 Enno Fischer (U. Bochum)
The pursuitworthiness of experiments. An analysis of "no-lose" theorems.

Coffee

11.50-12.35 Florian Boge (U. Dortmund)
Deep Learning for Scientific Discovery and the Theory Freedom-Robustness Trade- Off

12.35-14.00 Lunch

14.00-14.45 Jamee Elder (Tufts U.)
Theory Testing in Gravitational-wave Astrophysics

14.50-15.35 Ahmed Sarwar (U. Wuppertal)
Best explanation for the source of the information: The role of IBE in modern observations

Coffee

16.00-16.45 Slobodan Perovic (U. Belgrade)
Theoretical and Observational Explanations in Cosmology Following the Landmark Discovery of Cosmic Microwave Background (CMB) Radiation

16.50-17.50 Concluding discussion